



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D4842-1
Job Sheet 178083



Part No: D4842-1

Job Qty: 6 ea

Part Name: Lower Cutter Deflector



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/26/18

Job Tracking No:

Due Date: 8/16/18

Created By: Marie Lajeunesse

Type: ~~SOLD~~ *SLH*

Description:

Note: DWG REV B SHEET 2 IPP REV:A 13.04.26 NEW ISSUE DD VERF:JLM IPP REV:B PROCESS CHANGE
13/10/29 JFS VERIFY BY: JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	6 Ea	7/16/18	7/16/18	0.00	0.00	Start Up Machining-3		<i>MLH</i>
100	Bandsaw	6 pcs	7/16/18	7/16/18	0.00	2.84	Bandsaw1		<i>MLH</i>
110	CNC Vertical Machining	6 pcs	7/16/18	7/16/18	0.00	2.84	HAAS1-5		<i>MLH</i>
130	QC	6 pcs	7/16/18	7/16/18	0.00	0.00	QC8 Machining-3		<i>MLH 18/09/18</i>
140	Outsource	6 pcs	7/16/18	7/16/18			ATG001-VC		<i>MLH 18/09/18</i>
150	Packaging	6 pcs	7/16/18	7/16/18	0.00	0.00	Packaging2		<i>MLH 18/09/18</i>
155	QC	6 pcs	7/16/18	7/16/18	0.00	0.00	QC5		<i>MLH 18/09/18</i>
180	Packaging	6 pcs	7/16/18	7/16/18	0.00	0.00	Packaging3-2		<i>MLH 18/09/18</i>
190	QC21-SA	6 Ea	7/16/18	7/16/18	0.00	0.00	QC21		<i>MLH 18/09/18</i>

Part Op 100 - Cut Blank at 19.500" *** ONE BLANK MAKES TWO PARTS***

Descriptions: 110 - 1-Machine per folio FB222 DWG REV: _____ FOLIO REV: _____ 2- deburr and break all sharp edges

130 - QC8- Inspect parts - second check

140 - Outsource process- Issue P/O to ATG : *P0040921* HARD ANODIZE COLOR BLACK, PRIME AS PER DWG D4842

150 - Receive & Inspect for Damage & Mat'l Certs

155 - QC5- Inspect part completeness to step on W/O

180 - Identify as per dwg & Stock Location: _____

190 - QC21- Final Inspection - Work Order Release

5070018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M7075T6S0.375X5.000	M7075T6S0.375 X 5.000	4.8780 ft (.813 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M7075T6S0.375X5.000	5	62	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Lower Cutter Deflector	0.340Inches + 0.000 - 0.003	0.340 0.337		
2	Lower Cutter Deflector	0.040Inches ± 0.030	0.070 0.010		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																	
OTHER :																									

3	Lower Cutter Deflector	45.0Degrees $\pm$ 0.5	45.5 44.5	
4	Lower Cutter Deflector	0.700Inches $\pm$ 0.030	0.730 0.670	
5	Lower Cutter Deflector	8.650Inches $\pm$ 0.030	8.680 8.620	
6	Lower Cutter Deflector	0.380Inches $\pm$ 0.030	0.410 0.350	
7	Lower Cutter Deflector	0.177Inches $\begin{matrix} + 0.005 \\ - 0.001 \end{matrix}$	0.182 0.176	
8	Lower Cutter Deflector	0.320Inches $\pm$ 0.030	0.350 0.290	
9	Lower Cutter Deflector	0.630Inches $\pm$ 0.030	0.660 0.600	
10	Lower Cutter Deflector	0.970Inches $\pm$ 0.030	1.000 0.940	Radius
11	Lower Cutter Deflector	2.110Inches $\pm$ 0.005	2.115 2.105	
12	Lower Cutter Deflector	2.110Inches $\pm$ 0.005	2.115 2.105	
13	Lower Cutter Deflector	0.250Inches $\pm$ 0.030	0.280 0.220	Radius
14	Lower Cutter Deflector	0.130Inches $\pm$ 0.030	0.160 0.100	
15	Lower Cutter Deflector	45.0Degrees $\pm$ 0.5	45.5 44.5	

Plex 5/28/18 7:20 AM Dart.lajeunesse.marie

DART
AEROSPACE

1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 532-5200
Email: sales@dartero.com
www.dartero.com

Container No: **S107534**

Part: **D4842-1**

Job No: **178083**

Serial No/Batch: **S107534**

Revision:
Inspector:
Exp Date:
Instructions:

Date: 09/01/18

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER :			



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040921**

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO040921
PO Date: 9/4/18
Due Date: 9/26/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Phone:

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	181398	647.7813	Center Plate, Lower Issue P/O to ATG : Hard Black Anodize and Prime as per Dwg. 647.7800 Rev. A	Firmed	-	9/14/18	15 pcs	0 pcs	15 pcs	\$10.95/pcs	\$164.25
	182749			Firmed	-	9/26/18	35 pcs	0 pcs	35 pcs	\$10.95/pcs	\$383.25
Sub Total:							50	0	50		\$547.50

2	180124	646.3010	LH Half Issue P/O to ATG : Hard Black Anodize and Prime as per Dwg 646.3000	Firmed	-	9/14/18	12 pcs	0 pcs	12 pcs	\$12.45/pcs	\$149.40
3	178083	D4842-1	Lower Cutter Deflector Outsource process- Issue P/O to ATG : HARD ANODIZE COLOR BLACK, PRIME AS PER DWG D4842	Firmed	-	9/14/18	6 pcs	0 pcs	6 pcs	\$12.45/pcs	\$74.70

Grand Total: \$771.60

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 9/5/18 11:25 AM dart.tsimiklis.chrisoula



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T7
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 916043

Date: 17-Sep-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chrisoula Tsimiklis
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
✓ 50 ea	Part: 647.7813 ✓ Center Plate, Lower Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 23673 PO: PO040921 ✓ Line: 1	Rev: A	
✓ 12 ea	Part: 646.3010 ✓ LH Half Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 23674 PO: PO040921 ✓ Line: 2	Rev: NC	
✓ 6 ea	Part: D4842-1 ✓ Lower Cutter Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - .2 mils) per drawing. Job: 23675 PO: PO040921 ✓ Line: 3	Rev: B	
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>17/09/2018</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of Made in Canada.			



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 916043

Date: 17-Sep-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chrisoula Tsimiklis
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms

Ship Via

ATG Delivery

Quantity

Description

receipt.

Made in Canada.